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REMARKS

Reconsideration of presently solicited Claims 1, 3, 5 to 15, 18 to 22, 25, and 27 to 35 respectfully is requested. For the reasons indicated in detail hereafter, these claims, particularly as amended herein, are urged to be patentable over the different teachings of the newly cited references.

In a sincere effort to expedite prosecution the claims have been amended to specify preferred embodiments of Applicants' contribution. More specifically, as suggested at the top of Page 3 of the Official Action independent Claims 1 and 21 have been amended to recite the particle sizes of the iron-based core particles.

The present invention provides a specifically-defined ferromagnetic powder composition and method for die compaction to provide high density soft magnetic composite parts. Soft magnetic composite parts are made possible which display remarkably high magnetic induction levels together with low core loss. In spite of the very high densities, compacted parts with high electrical resistance can be successfully ejected from the dies without negatively influencing the finish of the die walls and/or the surfaces of the soft magnetic composite parts. It is thus possible to obtain quality compacted parts. Such results are achievable on an efficient basis while using a single compaction step.

It respectfully is submitted that the continued rejection of Applicants' presently solicited claims under 35 U.S.C. § 103(a) over the <u>different</u> teachings of U.S. Patent Nos. 6,855,394 to <u>Noguchi et al.</u> or 6,527,823 to <u>Moro</u> would be lacking a sound technical and legal bases. The <u>different</u> teachings of the cited prior publications deserve detailed consideration.

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The Noguchi et al. teachings concern non-analogous technology involving a magnetic recording medium. These teachings have absolutely nothing to do with die compaction technology and an improved specifically-defined ferromagnetic powder composition for use therein. One interested in die compaction would not look to the teachings of the references. See particularly the title and the "Field of the Invention" wherein a coating-type magnetic recording medium is applied as a thin magnetic layer for high density recording. Differences between the presently claimed invention and the express teachings of Noguchi et al. abound. For instance, the ferromagnetic powders utilized by Noguchi et al. are much smaller than those utilized in Applicants' different area of technology. See, in this regard, Col. 6, lines 2 to 4, of Noguchi et al. wherein it is indicated:

The average long axis length of the ferrogmagnetic metal powders is generally from 0.02 to 0.25 μm , preferably from 0.03 to 0.15 μm , and more preferably from 0.03 to 0.12 μm .

This information is consistent with Page Nos. 77 to 79 from Vol. 7 of ASM Handbook where it is indicated that powders used for magnetic recording media are nanoparticles having a particle diameter of < 1 µm or 1000 nanometers. A copy of this publication was provided with Applicants' submission of January 20, 2006. As indicated in Applicants' Specification, considerably coarser particles utilized when practicing Applicants' technology with respect to die composition. One skilled in the art would not contemplate the use of a nanopowder for die compressing. Applicants' contribution involving non-analogous die compaction to achieve particularly advantageous results is neither disclosed nor remotely suggested by the different teachings of Noguchi et al. Reference to the possible use of silane coupling agents

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in Noguchi et al. also does not reveal the usage of Applicants' specifically claimed lubricant compound in conjunction with the other claimed parameters. Even if compaction were attempted (which is not suggested), Applicants' specifically-claimed contribution still would not result.

The Moro teachings likewise are different and concern the preparation of dust cores where the formation of a high density product is not an objective. The Moro composition by necessity includes a resin as an insulating material as indicated in Fig. 1 and at the bottom of Col. 4 and the top of Col. 5. At the bottom of Col. 5 the quantity of the essential resin is indicated to be "preferably 1 to 30 percent by volume and more preferably 2 to 20 % by volume to the ferromagnetic powder". As indicated at Col. 6, lines 23 to 37, an inorganic insulating material may be used in combination with the insulating resin. However, no inorganic insulating material was utilized in the examples of Moro. It is mentioned in passing that "a silane coupling agent and a titanate coupling agent may be used" if present to "make the inorganic materials hydrophobic". Any silane used by Moro is not used for lubrication as in the present invention. Reference to a silane coupling agent in Moro does not reveal the usage of Applicants' specifically-claimed lubricant in conjunction with the other claimed parameters. See Table 3 of Applicants' Specification where it is revealed that it is not possible to use any silane Instead, Moro requires in all instances the use of aluminum stearate as a lubricant. Additionally, Moro recommends that the reader employ powder particles of a smaller size than those utilized in Applicants' different technology directed to the achievement of improved results during die compaction. See Col. 4, lines 29 to 32, of Moro in thus regard where it is stated:

The average particle diameter of the ferromagnetic powder is 5 to 150 μm , preferably 10 to 100 μm .

In the Examples of <u>Moro</u>, the average particle size of the Permalloy powder was only 13 µm. <u>Moro</u> contains <u>no</u> teachings with respect to formation of a high density product and is devoid of guidance for forming a high density product in an improved manner. It respectfully is submitted that there is no basis in law or fact for the sweeping unsupported conclusion with respect to obviousness expressed at Page 2 of the Official Action.

No improvement in die compaction technology is taught by the references and no *prima facie* basis showing of obviousness with respect to presently claimed subject matter is reasonably derived teachings of the references. To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested in the prior art. See M.P.E.P. § 2143.3 citing <u>In re Royka</u>, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in the claim must be considered when judging the patentability of the claim against the prior art". <u>In re Wilson</u>, 424 F.2d 1342, 165 USPQ 494 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim that depends therefrom is patentable. The subjective opinion of an Examiner without evidence in support thereof, does not provide a factual basis upon which a legal conclusion of obviousness may be reached. See <u>In re GPAC Inc.</u>, 57 F.3d 1573, 1582, 35 USPQ2d 1116, 1126 (Fed. Cir. 1995).

The mere allegation that the differences between the claimed subject matter and the prior art are obvious <u>does not</u> create a presumption of unpatentability. See <u>In re Soli</u>, 317 F.2d 941, 137 U.S.P.Q. 979 (CCPA 1963). Obviousness must be predicted on <u>something more than</u> it would be obvious <u>"to try"</u>. See <u>Ex Parte</u>

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Agrabright et al., 162 U.S.P.Q. 703 (POBA 1967), and In re Mercier, 515 F.2d 1161, 185 U.S.P.Q. 774 (CCPA 1975). It is well-established law that patentability determinations of this type would be contrary to the statute. See In re Antonie, 559 F.2d 618, 195 U.S.P.Q. 6 (CCPA 1977); In re Goodwin et al., 576 F.2d 375, 198 U.S.P.Q. 1 (CCPA 1978); and In re Tomlinson et al., 363 F.2d 928, 150 U.S.P.Q. 623 (CCPA 1966).

Applicants' specifically-claimed contribution is neither disclosed nor remotely suggested. The withdrawal of the sole remaining rejection is urged to be in order and is respectfully requested.

If there is any point that requires clarification prior to the allowance of the Application, the Examiner is urged to telephone the undersigned attorney so that the matter can be discussed and resolved.

It respectfully is requested that the safe receipt of the priority document that was submitted on April 9, 2004 be formally acknowledged so that this information will appear on the face of the patent when issued.

Respectfully submitted,

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